



Yale-New Haven
Teachers Institute®

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2006 Volume IV: Math in the Beauty and Realization of Architecture

Math, Music, and Architecture: Kindergarten Geometry and Aesthetics in Music and Architecture

Guide for Curriculum Unit 06.04.02
by Sunny Jonas

This unit reflects the world in which our students live - a world of connections and meaningful engagement that does not operate within tight confines of disciplinary boundaries. Utilizing the five senses: playing instruments that are analogous to mathematical principles in architecture (tactile, auditory), presenting images that elicit writing, musical composition (visual), and having experiences that involve smells and tastes, elicits critical thinking and dialogue in our explorations within the unit. In other words, this curriculum will enable students to engage their senses, our vision in the aesthetics of architecture, and hearing in musical listening and composition especially, to promote writing, reading, mathematics, composition, and conversation. The unit includes a field trip to Yale, counting shapes and colors in rose windows, listening to and counting the number of cymbal crashes in music, and other lessons that activate and build upon schema (students' prior knowledge). Finding these interdisciplinary connections within a culture and/or time period is an authentic way to explore the relationships that architecture, mathematics, and music have with each other.

(Developed for Mathematics, grade K; recommended for Music and Mathematics, grade K)

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